

The frequencies allotted under the Convention Regulations for the use of amateur experimentalists in New Zealand are as follow: 1,750–2,000 kilocycles (150–172 metres), and 3,500–4,000 kilocycles (75–85 metres). In addition, the use of the following bands is approved in special cases: 7,000–7,300 kilocycles (41–42·8 metres), 14,000–14,400 kilocycles (20·8–21·4 metres), 28,000–30,000 kilocycles (10–10·7 metres), and 56,000–60,000 kilocycles (5–5·35 metres).

Since the 1st January, candidates for mobile-station operator's certificates have been examined as prescribed by the Convention, the requirements of which necessitated the preparation of a new examination syllabus. By passing before the 31st December, 1931, an oral examination in the additional subjects, operators holding certificates issued under the provisions of the 1912 Convention may exchange them for the new certificates.

PATENT RIGHTS IN RESPECT OF RADIO APPARATUS.

The question has arisen from time to time during recent years whether the use of the apparatus installed for radio purposes in New Zealand has constituted an infringement of the patent rights registered in the Dominion in favour of Amalgamated Wireless (Australasia), Ltd. Although claims were made by Amalgamated Wireless (Australasia), Ltd., in respect of patents connected with wireless apparatus, the claims were not recognized until it appeared that they were actually valid in law. An agreement reached between the Commonwealth Government and the company established a precedent which could be regarded as setting a standard. Following protracted negotiations between the company and the New Zealand Government, an agreement was signed on the 30th October, 1928. The agreement provides for payment to the company of a percentage of the revenue accruing from a portion of the commercial traffic handled by New Zealand radio-stations. In return the company will make all its New Zealand patent rights available for wireless services owned and operated exclusively by the Government of New Zealand. The company has also been paid the sum of £10,852 in satisfaction of all past claims in respect of patent rights. Provision is made in the agreement for the use of the company's patent rights in broadcasting-apparatus in return for a payment of 3s. in respect of each radio receiving license. The agreement concluded is practically on the same basis as that made between the company and the Commonwealth Government.

NEW ZEALAND RADIO STATIONS: EQUIPMENT, OPERATION, ETC.

AWANUI RADIO.

Operation.—Owing to the displacement of long-wave high-power radio-working by the more economical high-frequency (short-wave) working on low power, this station, with its comparatively high-power plant, is now maintained solely for emergency purposes, no regular service being conducted. The staff has been correspondingly reduced, and the attendance curtailed to the hours of 9 a.m. to 5 p.m. daily, except Sundays and holidays.

AUCKLAND RADIO.

Operation.—In consequence of the curtailment of the services at Awanui Radio, Auckland Radio is now the sole station handling medium-wave ship traffic in northern New Zealand waters. Requests from ships for the operation of the radio beacon station at Cape Maria Van Diemen are now handled by Auckland Radio.

Masts.—Owing to deterioration, it has been necessary to replace the aerial masts at this station.

Remote Receiving-station.—The remote receiving system referred to in last year's report has been improved by the addition of a tuning-control. This apparatus is now established as part of the permanent plant of Auckland Radio and is in daily use.

WELLINGTON RADIO.

Erection of Separate Receiving-station.—The erection of a separate building to house the receiving equipment has been completed. It is the intention to operate the transmitting plant from the receiving-station by remote-control methods.

AWARUA RADIO.

Operation.—The service at this station has been characterized by smooth running throughout the year. The plant has given good service, and no stoppage or breakdown of any consequence has occurred.

Communication with the Antarctic.—As in the previous year, all traffic to and from the whaling-ships in the Antarctic was handled on frequencies between 8,500 and 10,000 kilocycles (wave-lengths between 30 and 35 metres). The amount of traffic exchanged with these ships during the year fell considerably owing to the vessels concerned having more modern radio apparatus which during certain hours of the day is capable of effecting two-way communication with the Norwegian headquarters. The traffic handled by Awarua Radio was confined almost exclusively to private messages from New Zealand members of the various crews, and to messages to and from the ships while at their base at Stewart Island.

In addition to the whaling-ships, the presence in the Antarctic of the Byrd Expedition caused a heavy increase in the traffic handled by this station.

High-power Plant.—In consequence of the advances in short-wave signalling, the high-power spark transmitter at Awarua Radio now serves only as an emergency unit, and will shortly become obsolescent.

Traffic.—Notwithstanding the fact that last year's operations created a record for the station, the number of messages handled during the year just closed greatly exceeded previous annual figures. The number of words handled was more than 50,000 in excess of the previous record.